

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.21**WELDING WITNESS REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000090**Date Inspected:** 23-Jan-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**Witness:** **Procedure Qualification Record**  
**Welding** **NDT**

**Welder Qualification** **Fracture Critical**  
**Mechanical Testing, describe:**

**Index Lot #:** B41-005-07a**Witness Lot #:** B41-028-07**Bridge No:** 34-0006**Component:** Bid 52, 55 Tower and Girder**Welder:** Xia Yong Zhong**ID #:** N/A**Joint Description:** B-U2a-GF ceramic**WPS ID #:** PWPS-B-T-2231T **N/A****Base Metal:** A709-50-2**PQR ID #:** HP2006116 **N/A****Thickness:** 60mm**Process:** FCAW **N/A****Electrode Spec/Class:** A5.20/E71T-1**Positions:** 1G **N/A****Backing Material:** Ceramic**CWI:** Liu Liu **N/A****Average Amps:** 284.8**AWS Code:** D1.5-2002 **N/A****Average Volts:** 28**Applicable Sec:** 5.13 **N/A****Travel Speed:** 190.1mm/min**Heat Input:** 2.52kj/mm **N/A****Preheat:** 218C**N/A****Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the retest of Charpy Vee Notch (CVN) mechanical testing of a Procedure Qualification (PQR) test plate using Flux Core Arc Welding (FCAW), using E71T-1 1.4mm electrode, in the 1G (flat) position, with a ceramic backing bar. The tests were performed per the AWS D1.5, Section 5.18 requirements. The welding appeared to comply with the contract documents

**Summary of Conversations:**

See Task Leader journal for this date.

**Observed welding,testing or results:**

is in general conformance with the contract requirements.

is not in conformance with the contract requirements.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

---

## WELDING WITNESS REPORT

( Continued Page 2 of 2 )

---

---

**Inspected By:** Wright,Mark

Quality Assurance Inspector

---

**Reviewed By:** McClary,David

QA Reviewer